Boston University
School of Medicine

Evans Department
of Medicine
Section of Preventive
Medicine and Epidemiology
88 East Newton Street
Boston, Massachusetts
02118-2393
TEL: 617 638-8080
FAX: 617 638-8076
E-mail: ellison@bu.edu

R. Curtis Ellison, M.D.
Chief

November 30, 1998

Dr. C.W. Jameson
NTP Report on Carcinogens Group
National Institute of Environmental Health Sciences
111 Alexander Drive
Research Triangle Park, NC 27709

Dear Dr. Jameson:

I have learned that your group will soon be considering the evidence to judge whether alcohol should or should not be considered a carcinogen. As an epidemiologist, I am certainly aware of the strong evidence that rates of certain upper aero-digestive cancers occur much more frequently among alcoholics than among non-drinkers or light drinkers. I agree with the findings that were reported in recent years by three major groups: (1) "Food, Nutrition Cancer Prevention" - Washington, DC - October 1997; (2) Society for Epidemiologic Research - Edmonton, Canada - June 1997; and (3) Committee on Carcinogenicity of Chemicals in Foods - UK - 1996. I have interpreted these three reports as concluding that alcoholism increases the risk of cancers of the mouth & pharynx, larynx, esophagus, and liver (if there is cirrhosis), as these are diseases that do not occur among light or moderate drinkers.

We all appreciate that heavy drinkers generally have a number of other lifestyle factors that may play a role in the development of cancer, including heavy smoking and varying degrees of malnutrition. Further, in some studies, heavy drinkers consuming similar amounts of alcohol from different beverages show differences in their risk of certain cancers, as shown many years ago by Rothman and his coworkers (Rothman KJ, Cann CI, Fried MP: The carcinogenicity of dark liquor. Am J Public Hlth 1989;79:1516-1520) and confirmed recently in a report from Copenhagen (Grønbaek M, Becker U, Johansen D, Tonnesen H, Jensen G, Sørensen TIA. Population based cohort study of the association between alcohol intake and cancer of the upper digestive tract. BMJ 1998;317:845-847). All of these findings make it difficult to assign causality to the alcohol in alcoholic beverages for diseases associated with abuse.

According to the above referenced groups that summarized data on alcohol and cancer, epidemiologic evidence does not support a relation of alcohol to the following cancers: bladder, stomach, pancreas, prostate, and kidney. The groups stated that there is still insufficient evidence as to whether alcohol is or is not related to the occurrence of other cancers: colon & rectum, breast, and lung. The strongest data for light-to-moderate drinking being associated with cancer of any type is for breast cancer, where many studies have shown a relation. Even here, however,

there are inconsistencies in the scientific data. For example, in January, 1999, we will publish in the American Journal of Epidemiology a report on the experience in the Framingham Study, in which one half of the more than 5,000 women have been followed since 1948-50 and the other half since 1970-74. In that study, in which we had repeated measures of alcohol consumption over decades and ongoing surveillance for breast cancer occurrence, we found that drinkers of any amount did not have a greater risk of breast cancer than lifetime abstainers.

While excessive alcohol consumption has numerous adverse effects on the health of individuals and on the community, current research data now clearly indicate that moderate and responsible drinkers are less likely to be hospitalized and are less likely to die than non-drinkers; in other words, moderate drinkers are healthier and live longer. It has long been known that moderate drinking is associated with a much lower risk of cardiovascular disease (especially coronary heart disease and stroke), which remains as the leading cause of death in the United States. A beneficial net effect of moderate drinking on health has been shown by the National Health and Nutrition Examination Surveys in the United States, the Framingham Study, the Nurses' Health Study, the huge American Cancer Study (showing 21% lower mortality for moderate drinkers) and hundreds of other studies. In fact, a British government commission (the Inter-Departmental Working Group, Department of Health, United Kingdom) in its most recent *Sensible Guidelines to Drinking* stated that, because of the very large risk of cardiovascular disease and the demonstrated reductions in risk from moderate drinking, "middle aged or elderly men and post-menopausal women who drink infrequently (less than one unit per day) or not at all may wish to consider the possibility that light drinking might benefit their health."

My associates and I have recently completed some analyses using a program on risk assessment developed by the Carter Institute and based on U.S. mortality tables. Our study was designed to estimate, among 45-75 year old American men and women who did not drink alcohol, what the effect would be on their risk of dying over the next 10 years if they began to drink moderately (defined as one drink per day for women and two drinks per day for men). For all men, regardless of their risk of cardiovascular disease, and for all women after age 55, regardless of their cardiovascular disease and breast cancer risk, the calculations estimated a *lower* risk of dying over the next 10 years if they began to drink than if they remained abstainers.

As your group reviews evidence on the association between alcohol consumption and various diseases, I trust that it will keep in mind that light-to-moderate drinking is, on average, associated with improved health and longevity. Any message coming from your group should clearly separate moderate drinking from alcohol abuse, and should not be worded in a way that might frighten moderate and responsible drinkers to stop drinking. If that should occur, the health of the nation would be adversely affected.

Thank you very much.

Sincerely,

R. Curtis Ellison, MD
Professor of Medicine & Public Health
Director, Institute on Lifestyle & Health

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